Health Sciences Libraries: Strategies in an Era of Changing Economics

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ABSTRACT

Libraries in health care settings reflect their parent institutions, which, in turn, are affected by environmental changes. The economic climate of the 1980s, unleashing competitive forces and threatening the survival of some institutions, has had a major impact on both hospitals and academic health centers. The challenge to libraries of these institutions calls for reassessment of programs and realignment in their power structures. It is argued that libraries which position themselves to capitalize on the current economic environment will create a future with new opportunities.

THE HEALTH CARE environment is dynamic. It is a turbulent arena that involves multiple stakeholders, vast amounts of resources, and—sometimes—opposing ethical parameters. For each major change in direction, health sciences libraries may anticipate ripples or waves of repercussion, including opportunity.

By design, health sciences libraries mirror their parent institutions, whether community hospitals or academic medical centers. Each library collection is unique in scope, reflecting the character and programs of its institution. Its services are tailored to meet the specific needs of its user populations. It should therefore come as little surprise that a change in the economic well-being of the sponsoring institution will be felt in its library.

The relationship of health sciences libraries to the economic tides of their sponsoring institution is broad. There is no simple cause-and-effect relationship; among the many variables are the institution's power structure and recognition of the library. This paper addresses the impact of these changes upon the libraries of hospitals and academic institutions.

HISTORICAL PERSPECTIVE

After World War II, the U.S. government began limited funding in biomedicine. Its first endeavor, in the 1940s, supported basic science research in academic medical settings [1]. By 1948, Congress moved to provide federal dollars for renovation and construction of hospitals through the Hill-Burton Act [2]. In 1965, the government became a major purchaser of health care services by extending the Social Security Act to provide health care for the elderly and the indigent through Medicare and Medicaid. These same years saw the passage of the Medical Library Assistance Act (MLAA, 1964), the Regional Medical Program (1965), and the Health Professional Manpower Act (1968).

The 1960s were lucrative years for health sciences libraries [3, 4]. The MLAA focused attention on the role of libraries in research, education, and patient care. At the same time, health care institutions were financially well positioned to support library growth. During this period, collections expanded, staffs increased and became better trained, and renovated libraries emerged [5].

In less than a decade, however, conditions began to change. By 1969, only three years after Medicare began, cutbacks in entitlements, scandals, and hospital overcrowding created a national health care crisis. Expansion of public and private financing had created a demand far in excess of the capacity of the health care system.

By 1972, President Nixon implemented health cost controls and instituted Professional Standards Review Organizations (PSROs). Federal funding, particularly for medical education, was reduced as the economy entered a period of recession.

Predictably, libraries felt the impact [6, 7]. As health care institutions attempted to trim costs to match reduced government payment for Medicare and Medicaid patients, libraries' budgets were cut with those of other institutional departments. Health sciences libraries were exhorted to plan, to reduce resources, and to apply business methods such as cost-effectiveness and cost-benefit ratios. Consortia flourished as libraries sought alternative

means for providing information. Interlibrary loans became crucial as the demand for information outstripped acquisition budgets.

Major Changes of the 1980s

Despite the belt-tightening lessons of the 1970s, few health care institutions were prepared for the economic challenges of the 1980s: prospective payment, competition, and new delivery systems.

The Tax Equity and Fiscal Responsibility Act (TEFRA) [8] and the prospective payment system (PPS) have forced all hospitals serving Medicare patients to think in terms of "bottom line." Each Medicare patient is a profit, a loss, or a break-even. As Bradford notes, "It is worthwhile to reflect on the real purpose of the Medicare program in adopting the DRG machination: to reduce the rate of increase of the government's payments for services rendered to Medicare beneficiaries without reducing program coverage" [9].

Further, prospective payment has forced hospitals to identify services as "products," to market lucrative product lines (such as cardiac surgery), and to drop financially unproductive services (such as obstetrics). Unaccustomed to payment based on diagnosis instead of cost, few hospitals had management information systems that could easily provide actual cost per diagnosis. New hospital information management systems became crucial to successful operation. Hospitals now look at all departmental cost centers to determine whether they are affordable in a cost-competitive environment.

Profit is further eroded by alternative health care payers such as preferred provider organizations (PPOs), health maintenance organizations (HMOs) and insurance companies, which are now claiming a share of the patient market. They are also negotiating with hospitals on the cost of hospitalization and services. Hospitals can no longer routinely shift losses to these alternate third-party payers.

Conditions are changing in the hospital milieu [10–12]:

—Some observers predict that as many as a thousand hospitals will close by 1990. Hospitals may lose their traditional role as the central locus of health care as alternative arrangements emerge.

—Physicians are no longer practicing alone but affiliating with groups and hospitals as paid staff. The physician is less and less in control of medical practice. Admissions are scrutinized, diagnosis reviewed in terms of DRG and treatment reviewed for compliance with "normal" cost.

—Hospitals are diversifying. Real estate ventures, corporate restructuring, and alternative health services are being explored to provide revenue sources.

—For-profit health care chains are expanding their ownership of hospitals across the country. Focus is less on quality of care and more on net result. As one hospital's controller put it, "the real question will be whether or not mortality rates go up."

—It has become more difficult for community hospitals to justify new technology. Cost benefit and potential profitability must be thoroughly analyzed prior to equipment purchase.

—Federal funding for construction and renovation is virtually nonexistent and hospitals are reluctant to assume debt in times of competition. Aging facilities will continue to grow old, contain empty beds, and consume dollars for unnecessary utility consumption.

This is a fairly bleak picture for hospitals. Some have radically realigned their services to become profit-making. Others, operating comfortably without a large Medicare load or competition, have yet to face the trauma of downsizing for a revised health care delivery system. There are some who have used up their reserves and are barely fending off creditors. Few have adjusted well to economic stringencies as the government continues to decrease its expenditures for health care.

Hospital Health Sciences Libraries

To take a worst-case scenario, some hospital libraries will go out of business when their sponsoring organizations prove unable to survive in a changing environment. Some libraries may close because the library staff has not made a strong enough case for the importance of health care information to the sponsoring institution. When bottom-line strategies are adopted, all services are examined in terms of real contribution. Librarians who have not successfully demonstrated the power of their information services to enhance corporate decision making, to reduce length of hospitalization, and to broaden individual staff skills may find themselves without a job, no matter how well the books are cataloged or how efficiently the journal check-in system operates.

One alternative for some hospitals is contracting for library services rather than underwriting a full library operation. Such hospitals perceive that selected information is adequate, and that their need for library services and resources may be limited. For some hospital administrators, it makes economic sense to purchase only specific information services. Contracting out will increase as bottom-line measures become more pervasive.

Still other libraries may be faced with corporate takeovers, mergers, or reorganizations. The library's physical facility may remain in place, or it may be downsized and relocated to save maintenance costs. Corporate mergers or takeovers provide opportunities to build new relationships and to educate others to the value of the library's information services, but these changes will test the librarian's political skills. Altering predetermined institutional plans is difficult at best.

As hospitals link with other hospitals, nursing homes, and alternative health care providers, new questions about primary and secondary user groups will arise. Libraries will need to be direct in approaching the fee-for-service question. Goodwill, often generated in the past by offering free library services to "friends" of the hospital, pays no bills. Careful negotiating through the hospital administration may provide alternative sources of fiscal support for library services.

Competition among health care providers of all types has placed another traditional library system in jeopardy. In the 1970s, the consortium brought together health sciences libraries with collections and staffs that were cooperatively enhanced. Hospitals, as corporations with hard profit goals, are now moving away from cooperation, except in very controlled situations. Consortia on a statewide or national scale may become more realistic, given computer technology and strong competition at the local level.

Hospital libraries are also confronted with shifting power bases within their institutions. For example, those which sought only the most powerful physicians as the primary library support team may be surprised to find that these physicians no longer have the same influence. The hospital administration itself has much more control than it did ten years ago. Many other spheres now influence its management decisions—data processing, finance, and medical records. Eliciting support from these new power groups is an opportunity that should not be missed by librarians who believe they are in the information business.

Driven by an overwhelming need to be cost competitive, hospitals will be examining every expense. Cost-benefit analysis will become more critical in the library's budget process than ever before. The library staff will need to work smarter rather than harder, by dropping superfluous functions, trimming excesses, and seeking less costly methods of providing timely information in adequate form to the right individuals. Supply and personnel budgets will be carefully scrutinized [13].

Changes in hospital services will lead to changes in collection scope and services. As hospitals expand into ventures such as real estate, home health care, and nursing home care, collections will need modification. In addition, the trend toward special product lines such as women's services (health promotion programs and outpatient centers for health education, screening, and primary care) and women's pavilion units (health care services in a home-like setting) is forcing hospitals to identify their marketing niches. As this occurs, the library's collection must change to reflect the services of the parent institution [14].

Hospitals of the 1980s require effective management information systems to provide data for administrative and economic decision making. For most hospitals, this need has not yet been met. Librarians now have a relatively large window of opportunity for systemizing and delivering information within the hospital [15]. Speed in positioning the library will be critical to prevent other "information specialists" from usurping that role.

Traditional hospital library users such as administrators, clinical physicians, and nurses are finding that economic pressures are also changing their roles. They must frequently examine common problems in new ways and in less time. Libraries will need to evaluate their current services in terms of their users' new pressures and they will need to consider repackaging information products. Customary library services will fall far short of satisfying information needs brought on by changes in health care delivery.

Custom-tailored library services will revive the persistent question of whether to charge costs back to individual hospital departments [16]. In a product line system, such payment mechanisms might be essential for library survival. However, it is important to recognize that unless the dollar benefit of information is apparent, most users who are accountable for their own product's bottom line will avoid such service charges.

In many hospitals, libraries are recognized as important components in the delivery of health care and the design of new services. Reel has described the approaches several hospital librarians have taken to assure the library's positive profile in a changing economic climate [17]. It is essential that hospital librarians review the needs of their own institutional users in today's economic climate and take proactive rather than reactive stances to

address these needs. It is possible not only to survive but to strengthen the role of the library in these changing times.

Academic Medical Center Libraries

Academic medical centers, unlike unaffiliated hospitals, rely on multiple sources for funding: tuition, research and development grants, and reimbursement for patient care [18]. Patient care revenue, which comes from primary teaching hospitals affiliated with the academic medical center and from clinical practice plans, has grown rapidly over the last decade. This revenue will be even more important in the future, but its sources are already in jeopardy [19, 20].

Primary teaching hospitals play a major role in supporting clinical faculty and in undergraduate and graduate medical education. Given that prospective payment will affect both teaching and nonteaching hospitals, it is clear that academic medical centers will be hard-pressed to maintain their traditional educational systems that support indigent care, provide clinical laboratories with the most current technology, and support medical education [21–23].

To complicate the economic picture, changes in federal allocation of health education and biomedical research dollars are jeopardizing other sources of academic health center funding. Alternative mechanisms for capping patient-care payments to physicians are being explored. A physician diagnostic-related group (PDRG) system would significantly alter the income brought in by flourishing clinical practice plans [24]. Elimination of direct medical education subsidies for residents, allied health professionals, and nurses is being proposed in President Reagan's fiscal 1987 budget [25]. Additionally, limits would be set on the salaries of interns and residents, creating disincentives for entry into the medical profession. These changes will have a significant impact on traditional clinical education.

Research funding for academic health centers is expected to be cut by $108 million in fiscal 1986 [26]. Basic science research will probably be most affected, given the general climate in Congress. Academic health centers are facing further research dollar reductions as federal consideration is given to reducing indirect grant costs [27, 28].

The third major source of academic medical center funding is tuition. As federal aid and related student support are being cut, tuition is rising (18% in 1983) [29]. Accounting strategy and tuition increases will reach their limits as the number of quality candidates for graduate medical education declines. Tuition will not be able to rise indefinitely to balance deficits in other funding components.

With this generalized scenario in place, it is clear that there will be changes:

1. Cooperative ventures will become more common.
2. Specialization of service will continue to increase.
3. Relationships with the for-profit sector, including industry and alternative health care delivery systems, will increase.

If the parent organization shifts mission and operational strategies [30, 31] in response to economic incentives and disincentives, health care libraries, too, will be forced to shift their focus.

Academic medical center libraries, unlike hospital libraries, occupy a central position within their center's educational mission. This unique position offers some shelter from the current economic turbulence surrounding health care. Wilson and McLaughlin note:

> The academic medical center is a knowledge-based, information-intensive service organization. Its products are educated students, new understanding and knowledge of human biology and pathophysiology, and [delivery of] medical care to populations who desire it from this particular type of institution. Information is a principal component of each of these [32].

Although the value of information to research, education, and patient care may be better recognized in these medical centers, academic libraries will also experience changes similar to those in hospital libraries.

Again, the worst-case scenario for academic health centers indicates that some medical schools may close because of "overproduction" of physicians, a decrease in the attractiveness of the health care professions, and increasing tuition with decreasing sources of support. Libraries affiliated with these schools may be sold or merged with general academic libraries.

Most academic health sciences libraries, however, are unlikely to feel the full impact of the prospective payment system, because their parent institutions have multiple funding sources. In the academic setting there are also information needs for the research, education, and patient care components of the center's mission. The belt-tightening offers an opportunity to libraries to move ahead as leaders in the process of restructuring academic health center information systems [33]. Belt tightening often hardens departmental barriers but pro-

vides incentives to promote and even demand cooperative activities to make the best use of limited fiscal resources. For library staffs motivated by change this could open doors to new programs that would never have been attempted in wealthier times.

In addition to changes in collection scope and coverage, there are other determinants of today's health care economics for programmatic change. These relate to new alliances, such as connections with referring physicians and industry. As practice plans grow, referral to specialty clinicians becomes more important. For example, many physicians who refer patients to university-based specialists lack affiliation with larger academic units and have little access to information resources. The library might be considered one component of an outreach plan to link these physicians with university-affiliated physicians.

A second alliance linkage worthy of serious consideration is the new relationship between industry and the academic medical center [34]. These new relationships raise questions about library services to persons jointly affiliated with industry and with the academic research unit. Astute early negotiations should ensure that full fiscal support for information services is a part of the contract.

Academic health center libraries should also be alert for opportunities to provide library service for hospitals that have opted to sign contractual arrangements rather than to finance their own libraries. Such contractual agreements could partly underwrite expenses of the academic health center library and at the same time provide information to outlying institutions.

Finally, economic changes are likely to force changes in medical education. As funding shifts, it may be necessary to reduce the number of faculty, to seek alternatives to the long-established internship, clerkship, and residency programs, and to move more rapidly on the GPEP agenda [35]. Libraries may need to become more active partners, even full partners, in the education process much sooner than anticipated [36]. Necessity is the mother of invention: lack of funding may be a critical motivator for the design of new solutions.

In the 1980s, new models have been suggested for the academic health sciences library [37, 38]. These encourage close relationships with the parent institution and broader roles in the management of information. Economic forces present both barriers and opportunities for librarians who would move their libraries forward.

Broader Issues Raised by Economic Changes in Health Care

Shifts in the traditional tenets of health care as a social good have major implications for the future health of the country. Rieselbach and Jackson argue that "rapidly advancing trends establishing medical care as an economic product rather than a social good have created an unprecedented threat to our present highly developed system for the graduate education of physicians. Those same forces are limiting the capacity of teaching hospitals to care for the medically indigent" [39]. Similar forces are operating in the information field; information, long considered a public good, is now valued by some solely for its profitability [40].

These issues raise serious questions for society as a whole; the direction to be taken is not clear. Congress today speaks little about public good and volumes about profitability. According to a member of the Health Care Financing Authority staff, the societal impact of changes in Medicare structure is not even scheduled for evaluation in the five-year research agenda currently mapped out by the agency.

Economically, all librarians, particularly health sciences librarians, face turbulent times ahead. Information has taken on "product" connotations, with attached financial worth, marketability, and profit lines. Questions of equal access and societal good are bruised in the rush to capitalize on new markets. As Cummings noted: "This founder of our nation [James Madison] recognized that citizens require free and equal access to information to remain a free people. We need to remind those who represent us in government that we are concerned with the serious erosion of this important national commitment" [41].

Libraries in the health care environment are likely to be buffeted by the struggle on both horizons between public good and profit margin. Both battles will test beliefs that run deep for health sciences librarians.

Conclusion

Health sciences libraries are not islands unto themselves. They reflect the philosophy, mission, and economy of their parent institutions. The health care economy has been altered radically since the "good years" of the 1960s, when a major influx of dollars from the federal government set off unprecedented growth in the health care field. With the prospective payment and projected budget cuts yet to come, the health care industry is

undergoing major evolution into competitive, lean delivery systems. Librarians compelled to trim budgets in the 1970s will feel the impact of the competitive environment in many different ways in the 1980s.

Drucker has said: "For the one certainty about the times ahead, the times in which managers will have to perform, is that they will be turbulent times. And in turbulent times the first task of management is to make sure of the institution's capacity for survival, to make sure of its structural strength and soundness, of its capacity to survive a blow, to adapt to sudden change, and to avail itself of new opportunities" [42]. His advice is as valid for libraries as it is for their parent institutions. A library's capacity for survival depends on the willingness of its staff to understand the health care economic milieu and on its capacity to adapt to the constantly changing needs of its users.

Librarians in both hospital and academic health sciences centers *must* capitalize on the current economic environment to create a new future for health sciences libraries. Christopher has aptly summed it up: "The environment is not something out there constraining us. Environment is something we must be a part of, and environmental constraints are the interacting relationships that we must manage" [43].

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